TDRS Project Office
TDRS Continuation Activities

The Project has been conducting Pre-Phase A studies towards development of requirements for the next generation of relay satellites. These studies were initiated in the Spring of 2003 in response to letter direction from the Headquarters Office of Space Communication (Code M3). An interim report addressing topics in this letter was completed in December of last year and briefed to Code M3.

In parallel with these studies, the Project commissioned Aerospace in September of 2003 to perform an independent analysis of the expected longevity of the current on-orbit fleet of spacecraft. The results of this study were reviewed in early March. Since then, as various replenishment and loading scenarios are identified, Aerospace has been running "what –if" cases against the model they developed. Results from these runs have been provided to Code M3 in support of their budget planning activities.

The Project has been examining ways of providing, expanding, or improving the performance of the heritage services. Several areas where improvements in technology would offer tangible benefits have been identified in conjunction with AETD and have been submitted as candidates for the Technology Development Program. Currently, work (with GRC and ARC participation) is in progress on an enhanced S-Band Multiple Access (MA) antenna element. The objective of this effort is to explore whether SA performance and characteristics (dual polarization, frequency tunability, and enhanced performance over a wider Field-of-View) can be achieved via the MA phased array.

The Project continues to support the Space Architect's Space Communications Working Group in support of Code M3 on definition of future spacecraft concepts and system architectures. These have included studies on the ability of the existing Space Network to support missions being developed by the Exploration Program. Currently the Project is planning on transitioning to the Formulation phase in FY' 06.

By Jeff Gramling
Formulation Manager, TDRS Continuation
TDRS Project Office
Contact at (301) 286-6652
Jeffrey.J.Gramling@nasa.gov

The Space Communications Program family offers it's deepest sympathies to Joanne Lodowski on the death of her husband, Kenneth, on May 7. Our thoughts are with Joanne and her family at this time.